

CLAIM AMENDMENTS

IN THE CLAIMS:

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Previously Presented) A method for fabricating a damage resistant photomask, the method comprising:

forming a photomask pattern including a plurality of features on a substrate, the features formed of an optical absorber; and

forming a transparent, protective coating on the photomask pattern, the transparent, protective coating operable to prevent the features from being damaged by electrostatic discharge.

2. (Original) The method of Claim 1, wherein forming the transparent, protective coating on the photomask pattern comprises coating the photomask pattern with a material that has an electrical resistivity of at least ten ohm meters.

3. (Original) The method of Claim 2, wherein the material comprises spin-on glass.

4. (Currently Amended) The method of Claim 1, wherein forming the photomask pattern comprises:

forming a layer of the absorber on the substrate; and

removing portions of the absorber from the substrate to form at least one trench in the absorber layer; and

wherein the protective coating extends into the at least one trench in the absorber layer.

5. (Previously Presented) The method of Claim 1, wherein forming the photomask pattern comprises:

forming a layer of the absorber on the substrate; and

removing portions of the absorber from the substrate to form a pattern with clear areas and opaque areas; and

removing material from the substrate in one or more of the clear areas to form one or more trenches in the substrate.

6. (Original) The method of Claim 1, wherein forming a transparent, protective coating on the photomask pattern comprises:

depositing material on the photomask pattern; and

curing the material to form the transparent, protective coating.

7. (Original) The method of Claim 1, further comprising planarizing the transparent, protective coating.

8. (Original) The method of Claim 1, further comprising forming an antireflective layer on the transparent, protective coating.

9. (Cancelled).

10. (Original) The method of Claim 1, further comprising forming the transparent, protective coating from a material selected from the group consisting of silicon dioxide (SiO_2), aluminum oxide (Al_2O_3), aluminum nitride (AlN), silicon nitride (Si_3N_4), tantalum oxide (Ta_2O_5), yttrium oxide (Y_2O_3), magnesium fluoride (MgF_2), magnesium oxide (MgO), zirconium oxide (ZrO_2), lithium fluoride (LiF), aluminum fluoride (AlF_3), and calcium fluoride (CaF_2).

11. (Original) The method of Claim 1, wherein forming the transparent, protective coating comprises using a technique selected from the group consisting of physical vapor deposition, chemical vapor deposition, and gas phase deposition techniques to form the transparent, protective coating.

12. (Previously Presented) A damage resistant photomask, comprising:
a photomask pattern including a plurality of features formed on a substrate, the features formed of an optical absorber; and
a transparent, protective layer formed on the photomask pattern, the transparent, protective coating operable to prevent the features from being damaged by electrostatic discharge.

13. (Previously Presented) The photomask of Claim 12, wherein the transparent, protective layer comprises a material that has an electrical resistivity of at least ten ohm meters.

14 (Previously Presented) The photomask of Claim 13, wherein the material comprises spin-on glass.

15. (Previously Presented) The photomask of Claim 12, further comprising:
the substrate formed from transparent material;
a patterned layer of the absorber formed on the substrate; and
the transparent, protective layer covering the absorber.

16. (Previously Presented) The photomask of Claim 12, further comprising:
the substrate formed from transparent material;
a patterned layer of the absorber formed on the substrate;
trenches formed in the substrate; and
the transparent, protective layer covering the absorber.

17. (Previously Presented) The photomask of Claim 12, further comprising an antireflective layer formed on the transparent, protective layer.

18. (Original) The photomask of Claim 12, further comprising a pellicle attached over the transparent, protective layer.

19. (Original) The photomask of Claim 12, wherein the transparent, protective coating comprises a material selected from the group consisting of silicon dioxide (SiO_2), aluminum oxide (Al_2O_3), aluminum nitride (AlN), silicon nitride (Si_3N_4), tantalum oxide (Ta_2O_5), yttrium oxide (Y_2O_3), magnesium fluoride (MgF_2), magnesium oxide (MgO), zirconium oxide (ZrO_2), lithium fluoride (LiF), and aluminum fluoride (AlF_3).

20-22. (Cancelled).

23. (Previously Presented) A damage resistant photomask, comprising:
a patterned absorber layer including a plurality of clear areas and a plurality of opaque areas formed on at least a portion of a substrate; and
a transparent protective layer formed on the absorber layer, the transparent, protective coating operable to prevent the opaque areas from being damaged by electrostatic discharge.

24. (Previously Presented) The photomask of Claim 23, wherein the protective layer comprises a dielectric material.

25. (Previously Presented) The photomask of Claim 23, further comprising:
the substrate including a first refractive index; and
the protective layer including a second refractive index greater than the first refractive index.

26. **(Currently Amended)** The photomask of Claim 23, further comprising:
a trench ~~form~~ formed in the substrate proximate at least one of the clear areas, the
trench including a bottom and at least one wall; and
the protective layer formed in the trench.